

#### ABSTRACT

An optical fiber component comprises an optical element (1), a pair of PhC fibers (2a, 2b) with a large MFD (approximately 30 to 50  $\mu\text{m}$ ), and a pair of SM fibers (3a, 3b) with a small MFD (approximately 10  $\mu\text{m}$ ). The pair of the PhC fibers (2a, 2b) has cores (21a, 21b) for transmitting light and clads (22a, 22b) provided on the outer periphery of the cores (21a, 21b). An output end of a first PhC fiber (2a) is optically connected to a light incident end-face (1a) of the optical element (1) with the first PhC fiber output-end aligned with the optical axis of the optical element (1). An input end of a second PhC fiber (2b) is optically connected to a light exit end-face (1b) with the second PhC fiber input end aligned with the optical axis of the optical element (1). An output end of a first SM fiber (3a) is optically connected to the input end of the first PhC fiber (2a) with the first SM fiber output-end aligned with the optical axis of the first PhC fiber. An input end of a second SM fiber (3b) is optically connected to an output end of the second PhC fiber with the second SM fiber input-end aligned with the optical axis of the first PhC fiber.